

REMARKS

Claims 1-14 are pending in the above-identified application. Claims 1-14 were rejected. With this Amendment, claims 1, 3-4, 7, 9-10, and 13-14 were amended and claims 2 and 8 were cancelled. Accordingly, claims 1, 3-7, and 9-14 remain at issue.

I. 35 U.S.C. § 103 Obviousness Rejection of Claims

Claims 1, 5, 7, and 11 were rejected under 35 U.S.C. § 103(a) as being purportedly anticipated by *Imatsuka* (JP 2002095051) in view of *Schreier* (US 6,275,480). Claims 2, 3, 8 and 9 were rejected under 35 U.S.C. § 103(a) as being purportedly unpatentable over *Imatsuka* in view of *Schreier* and in further view of *Seppanen* (US 6,330,442). Claims 4 and 10 were rejected under 35 U.S.C. §103(a) as being purportedly unpatentable over *Imatsuka* in view of *Seppanen* as applied to claims 1 and 7, and further in view of *Seppanen* and *Harris et al.* (US 6,400,755). Claims 6 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Imatsuka* in view of *Schreier*, further in view of *Vega et al.* (US 6,282,407). Claims 13 and 14 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Imatsuka* in view of *Schreier* and *Seppanen* as applied to claims 2 and 8, and further in view of *Gallagher et al* (US 2004/0116120). Applicant respectfully traverses these rejections.

Though Applicant do not necessarily agree with the Examiner's rejections, to further prosecution, Applicant has amended claims 1 and 7 to incorporate the limitation of canceled claims 2 and 8, respectively. However, Applicants reserve the right to pursue the subject matter of the original claims in subsequent applications.

With respect to independent claim 1 as amended and referring to Fig. 1 as an illustrative example, Applicant claims a radio communication method in a phone 100 having a first part 110 operatively configured to make a first bidirectional radio communication with a predetermined station 140 and a second part 120 operatively configured to make a second bidirectional radio communication with a reader/writer 150 when the phone 100 is positioned adjacent to the reader/writer 140. The method has the following step limitations:

detecting, via the second part of the phone, a signal transmitted by the reader/writer to start the second radio communication with the reader/writer; and
in response to detecting the signal transmitted by the reader/writer to start the second radio communication with said reader/writer, temporarily stopping output of transmission data in the first radio communication with said predetermined station such that the second radio communication is inhibited from causing interference in the first radio communication,

wherein the step of temporarily stopping output of transmission data comprises stopping, via a controller associated with the second part of the phone, the inputting of transmission data into a buffer that temporarily stores the transmission data.

Independent claim 7 as amended has limitations similar to claim 1. With respect to claims 1 and 7, Applicant teaches that a radio communication unit (e.g., phone 100) incorporating the second part 120 for communication with a reader/writer 150 and adapted to perform the claim 1 method is able to prevent a signal generated by the communication with the reader/writer 150 from interfering with or “jamming” transmission data sent by the first part 110 to the predetermined

station 140. *See* Application at pg. 4 lines 15-26; pg. 16 line 7 - pg. 22 line 20; Figs. 1-7. The Applicant further teaches that upon detection of the signal generated by the reader/writer 150, that a controller 123 associated with the second part 120 of the phone inhibits further output of transmission data from the first part 110 to the predetermined station 140 by stopping the inputting of transmission data into the buffer 119 in the first part 110 that temporarily stores the transmission data. Applicant teaches and claims (see claims 13 and 14) that the first part 110 of the phone 100 includes a software-hierarchy communication model (e.g., see Fig. 3) having a data-link layer 203 operatively configured to manage transmission data congestion when in a first mode and that the controller 123 takes advantage of this structure of the first part 110 by forcing the data-link layer 203 into the first mode in order to temporarily stop the input of transmission data into the buffer 119 associated with the data-link layer 203 from an upper layer (e.g., the network layer 204 and the application layer 205). *See* Application at pg. 15 line 15 - pg. 16 line 7; pg. 18 lines 3-23; pg. 19 line- pg. 20 line 12; Figs. 1, 3, 4, and 6. The Applicant further discloses that by implementing the method in claim 1 (and the unit in claim 7) using a second part 120 with a separate communication processor 122 and controller 123, “no new circuit is required for hardware” in the first part of the phone. Thus, conventional mobile phones may be easily modified “without difficulty,” resulting in “lowering the cost of the mobile phone unit and miniaturization thereof.” *See* Application at pg. 23 lines 8-19. .

Imatsuka, alone or in combination with any of the other cited references, fails to teach a phone implementing the method of amended claim 1. *Imatsuka* discloses a portable telephone M that may be used to transfer through an automatic ticket gate 2 that has a reader/writer 42.

Imatsuka further discloses that a single control circuit 20 supports communication to a partner on a call and to the reader/writer 42. In addition, *Imatsuka* teaches that the control circuit 20 determines whether the portable telephone M is transmitting a call to a partner only after the communication between the reader/writer 42 and the control circuit 20 has been established and potentially interfering or jamming communication signals (e.g., initial inquiry, station code, and time code) are transmitted by the reader/writer. In particular, *Imatsuka* discloses that when an initial inquiry (e.g., a signal to start communication) is received by the control circuit 20 from the reader/writer 42, the control circuit 20 continues to allow transmission data to be sent to the partner on the call while the reader/writer is transmitting data (e.g., station code and time code) to the portable telephone M to provide notice that the caller is “entering this station ... in how many minutes.” Moreover, *Imatsuka* teaches sending the station and time codes to the partner on the call before the call is interrupted so that accounting charges do not apply to the call while the caller is attempting to transfer through the automatic ticket gate 2. See *Imatsuka*, paragraphs [0016]-[0053]; Figs. 1-6.

Thus, *Imatsuka* fails to teach at least the claim 1 step limitations of “*detecting ... a signal transmitted by the reader/writer to start the second radio communication with the reader/writer; and in response to detecting the signal transmitted by the reader/writer to start the second radio communication with said reader/writer, temporarily stopping output of transmission data in the first radio communication with said predetermined station such that the second radio communication is inhibited from causing interference in the first radio communication.*”

The Examiner acknowledges that *Imatsuka* fails to teach that “the temporary stop is such that the second radio communication is inhibited from causing interference in the first radio communication” but argues that *Schreier* teaches this missing limitation. Applicant respectfully disagrees.

Imatsuka does not teach teaching stopping the first radio communication to inhibit causing interference. To the contrary, *Imatsuka* teaches stopping only to avoid billing or accounting for the time when the second radio communication with the reader/writer is taking place. Moreover, Applicant submits that *Imatsuka* teaches away from stopping the first radio communication to inhibit communication in the second radio communication as *Imatsuka* clearly discloses sending the station and time codes to the partner on the call before the first radio communication call is interrupted to provide “guidance” to the partner on the call. See *Imatsuka*, paragraphs [0041]-[0053]; Fig. 6. Accordingly, *Imatsuka* teaches away from Applicant’s invention as claimed in claim 1 (or claim 7).

Furthermore, *Schreier* teaches a satellite TDMA cellular communications system 10 comprising terrestrial terminals 14, 16, 18 each having an interleaver or inserter 203 to select between “traffic information or call maintenance” control signals thereby selectively interrupting “traffic information” to allow “another action to be performed.” *Schreier*, Col. 3:20-66; Col. 6:58-65. *Schreier* further teaches avoiding interference through the use of a TDMA burst communication control system 18 and selecting whether the traffic signals or the call maintenance signal is transmitted to the respective terrestrial terminal 14, 16, 18, which is different than “temporarily stopping output of transmission data” from a phone as taught and

claimed by the Applicant. See *Schreier*, Col. 3:20-66; Col. 7:14-25. Moreover, *Schreier* discloses that “[d]uring the time in which interleaver 203 connects to call maintenance signal source 202 ..., the traffic signals from traffic information source 201 are not transmitted, and are lost.” *Schreier*, Col. 3:53-56.

Thus, assuming arguendo that *Imatsuka* did not teach away from Applicant’s invention, Applicant submits that the system disclosed by *Schreier* would not improve *Imatsuka*’s portable telephone device as the interleaver 203 would cause the call to the partner to be dropped or lost before the partner receives the “guidance” regarding the reader/writer communication at the ticket gate as taught by *Imatsuka*. Accordingly, Applicant submits there is no motivation or suggestion to combine the teachings of *Schreier* with the teachings of *Imatsuka*.

In addition, the Examiner acknowledges that neither *Imatsuka* nor *Schreier* disclose the claim 1 limitation of “*stopping output of transmission data ...[by] stopping, via a controller associated with the second part of the phone, the inputting of transmission data into a buffer that temporarily stores the transmission data.*” The Examiner argues that *Seppanen* teaches this missing limitation. However, Applicant submits that neither *Seppanen*, *Imatsuka* nor *Schreier* teach “stopping the inputting of transmission data into [the phone transmission] buffer” as taught and claimed by the Applicant.

Accordingly, Applicant submits that neither *Seppanen*, *Imatsuka* nor *Schreier* (alone or in combination) fails to teach or suggest all the limitations of claim 1 or claim 7, and respectively requests that the rejection to claims 1 and 7 be withdrawn.

In addition, with regard to claims 13 and 14, the Examiner argues that *Gallagher* teaches the limitation that “*the first part of the phone includes a software-hierarchy communication model having a data-link layer operatively configured to manage transmission data congestion when in a first mode and the step of temporarily stopping output of transmission data further comprises temporarily forcing the data-link layer into the first mode.*” Applicant respectfully disagrees.

Gallagher discloses a phone that includes “a software-hierarchy communication model having a data-link layer” but fails to teach that the “*data-link layer [is] operatively configured to manage transmission data congestion when in a first mode*” or “*temporarily forcing the data-link layer into the first mode*” in order to temporarily stop the “*output of transmission data*” by “*stopping ... the inputting of transmission data into [the] buffer that temporarily stores the transmission data*” as taught and claimed by the Applicant.

Accordingly, Applicant submits *Gallagher* (alone or in combination with any of the other cited references) fails to teach or suggest the limitations of claim 13 or claim 14, and respectively requests that the rejection to claims 13 and 14 be withdrawn.

Claims 3-6 and 13 depend from claim 1 and should be deemed allowable for at least the same reasons as claim 1. Claims 9-12 and 14 depend from claim 7 and should be deemed allowable for at least the same reasons as claim 7. Accordingly, Applicant respectfully requests that the rejection to dependent claims 3-6, 9-12, and 13-14 be withdrawn.

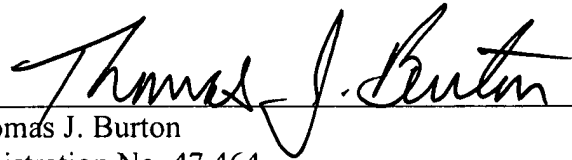
II. Conclusion

In view of the above amendments and remarks, Applicant submits that claims 1, 3-7, and 9-14 are clearly allowable over the cited prior art, and respectfully requests early and favorable notification to that effect.

Respectfully submitted,

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